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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,591	05/24/2001	Jeffrey R. Bernhardt	4254 15-849	2124

7590 05/12/2004
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EXAMINER

WONG, LESLIE

ART UNIT PAPER NUMBER

2177

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/864,591

Applicant(s)

BERNHARDT ET AL.

Examiner

Leslie Wong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Receipt of Applicant's Amendment, filed 05 March 2004, is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3, 5-8, 10, 12, and, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bossemeyer, Jr. et al.** (U.S. Patent 6,510,427 B1) in view of **Choy** (U.S. Patent 5,960,431).

Regarding claims 1 and 10, **Bossemeyer, Jr. et al.** teaches a method and computer readable medium of identifying a subset of records within a database for purposes of representing said database comprising:

a). choosing a selection attribute from one of a plurality of attributes contained in records within the database (col. 5, lines 43-46).

b). scanning records in the database (col. 6, lines 13-19)

c). applying a selection criteria to identify records for inclusion within a subset of records by comparing the record value of each record within the selection criteria (col. 6, lines 13-24)

b). **Bossemeyer, Jr. et al.** does not explicitly teach a step of **applying a randomizing function** to the selection attribute of each record to create a randomized record value.

Choy, however, teaches a step of applying a randomizing function to the selection attribute of each record to create a randomized record value (col. 1, lines 33-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined the teaching of the cited references because **Choy's** randomizing function on one or more data fields would have allowed **Bossemeyer, Jr. et al.'s** to quickly select records to be included in the sample set that are evenly distributed across the database, thus the sample data would represent the entire database in a more accurate manner.

c). **Bossemeier, Jr. et al.** does not explicitly teach a step of **comparing** the **randomized record value** of each record within the selection criteria.

Choy, however, teaches a step of generating the randomized value of each record (col. 1, lines 33-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined the teaching of the cited references because **Choy's** generating the randomized value for each record would have allowed **Bossemeier, Jr. et al.'s** to quickly compare records in the database to determine if they met the selection criteria, thus it would reduce the search time to locate the records to be included in the sample set.

Regarding claims 3 and 12, **Bossemeier, Jr. et al.** further teaches wherein the selection attribute contains a text string that is used as an input parameter to the randomizing function (i.e., comment field) (col. 5, lines 23-35).

Regarding claims 5, 6, 8, 14, and 15, **Bossemeier, Jr. et al.** implicitly teaches wherein subset of records that represent the database are transmitted from a server computer to a client computer by means of network (col. 5, lines 5-8; col. 6, lines 5-7 and abstract).

Bossemeier, Jr. et al. does not explicitly teach said server computer including **instructions for sending a dataset** made up of a subset of the records in the database to a client computer via the network.

Although, **Bossemeyer, Jr. et al.** does not explicitly disclose that server computer including instructions for sending a dataset made up of a subset of the records in the database to a client computer via the network, it should be understood that in the client/server arrangement, the client generally performs a request for the data and the server processes that request and returns the data to the client.

Regarding claim 7, **Bossemeyer, Jr. et al.** further teaches a client/server computer apparatus comprising:

- a). one or more client computers coupled to a network and including communications instructions for requesting a data set by means of the network (Fig. 1, lines).
- b). a server computer coupled to the network and having access to a database having a number of records (col. 5, lines 5-8; col. 6, lines 5-7 and abstract).

Bossemeyer, Jr. et al. does not explicitly teach said server computer including **instructions for sending a dataset** made up of a subset of the records in the database to a client computer via the network.

Although, **Bossemeyer, Jr. et al.** does not explicitly disclose that server computer including instructions for sending a dataset made up of a subset of the records in the database to a client computer via the network, it should be understood that in the client/server arrangement, the client generally performs a request for the data and the server processes that request and returns the data to the client.

c). **Bossemeyer, Jr. et al.** teaches said server computer including instructions for scanning records the database (col. 6, lines 13-19), and comparing the record value with a selection criteria to determine whether to include a record in the subset of records from the database for transmission via the network to the client (col. 6, lines 13-24).

Bossemeyer, Jr. et al. does not explicitly teach a step of applying a randomizing function to a specified record attribute of each record in the database to produce a randomized record value.

Choy, however, teaches a step of applying a randomizing function to a specified record attribute of each record in the database to produce a randomized record value (col. 1, lines 33-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined the teaching of the cited references because **Choy's** randomizing function on one or more data fields would have allowed **Bossemeyer, Jr. et al.'s** to select records to be included in the sample set to be evenly distributed across the database, thus the sample data would have represented the whole database in a more accurate manner.

c). **Bossemeyer, Jr. et al.** does not explicitly teach a step of **comparing** the **randomized record value** of each record within the selection criteria.

Choy, however, teaches a step of generating the randomized value of each record (col. 1, lines 33-40).

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It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined the teaching of the cited references because **Choy's** generating the randomized value for each record would have allowed **Bossemeyer, Jr. et al.'s** to quickly identify records that are met the selection criteria, thus it would reduce the search time to locate the record in the database to be included in the sample set.

4. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bossemeyer, Jr. et al.** (U.S. Patent 6,510,427 B1) in view of **Choy** (U.S. Patent 5,960,431) as applied to claims 1, 3, 5-8, 10,12, and, 14-15 above and further in view of **Fayyad et al.** (U.S. Patent 6,012,058).

Regarding claims 2 and 11, **Bossemeyer, Jr. et al.** and **Choy** teach wherein the selection attribute contains a numeric value (i.e., product code) (col. 5, lines 59-63).

Bossemeyer, Jr. et al. and **Choy** do not clearly teach wherein additionally comprising **scaling the numeric value with a factor** before applying the randomizing function.

Fayyad et al., however, teaches wherein the selection attribute contains a numeric value and additionally comprising scaling the numeric value with a factor before applying the randomizing function (col. 13, lines 5-23).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined the teaching of the cited references because

Fayyad et al.'s scaling numeric value would have allowed **Bossemeyer, Jr. et al.**'s in combination with **Choy's** to specify the number of records from the database to be included in the sample set.

5. Claims 4, 9, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bossemeyer, Jr. et al.** (U.S. Patent 6,510,427 B1) in view of **Choy** (U.S. Patent 5,960,431) as applied to claims 1, 3, 5-8, 10,12, and, 14-15 above and further in view of **Wass et al.** (Counting, Enumerating, and Sampling of Execution Plans in a Cost-Based Query Optimizer).

Regarding claims 4, 9, and 13, **Bossemeyer, Jr. et al.** and **Choy** do not clearly teach wherein the scanning of records and applying the selection criteria is implemented by an SQL statement that includes a randomizing function.

Waas et al., however, teaches wherein the scanning of records and applying the selection criteria is implemented by an SQL statement that includes a randomizing function (abstract lines 1-3 and pg. 499, right column, third paragraph).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined the teaching of the cited references because **Waas et al.**'s generation of random SQL statements would have allowed **Bossemeyer, Jr. et al.**'s in combination with **Choy's** to quickly generate random statements to be tested.

Response to Argument

6. Applicant's arguments filed 05 March 2004 have been fully considered but they are not persuasive.

Applicants argue that Bossemeyer teaches away from the present invention because the prior art concerns searching over an entire database to select a subset of the records of the database. In response to the preceding arguments, Examiner respectfully submits that Applicants broadly claimed limitation "***scanning records in the database*** and applying a randomizing function ..." reads on Bossemeyer's teaching of searching and returning all records in the database that met the search criteria. The above-recited limitation does not clearly specify how many records from the entire database it would scan in the course of identifying and constructing a subset of records that represent the database. Thus, it is submitted that Bossemeyer satisfies the limitation as claimed.

Applicants further argue that Choy teaches transformation of the value of one or more data fields to divide a database up into sections for record access and that there is no suggestion in Choy to apply a selection criteria to reduce the size of the database and produce a representative sample of the database. In response to applicants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some

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teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Bossemeyer teaches a customer feedback acquisition system. Bossemeyer's database can be searched to develop a subset of records pertaining to an area of interest and a data-mining tool can then be used on the subset to identify trends in the customer feedback records (abstract). Bossemeyer does not explicitly teach a step of **applying a randomizing function** to the selection attribute of each record to create a randomized record value. Choy, compliments the missing feature by teaching a system for balancing partitioned database contents by generating bucket-to-bin mappings to facility parallel processing (col. 1, lines 10-13 and 24-29). Choy's table records are distributed among buckets by means of a **randomizing function** that produces a bucket Id (i.e. partition key) for each record. Distribution of records to a number of storage locations also reduces the search domain for a record-access by its partition key (col. 1, lines 30-40). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined the teaching of the cited references because Choy's randomizing function on one or more data fields would have allowed Bossemeyer's to quickly select records to be included in the sample set within the database (col. 1, lines 38-40). It is well-known in the art that randomized algorithms offer speed and simplicity benefits to the system (see Motwani et al.). Thus, combining the above references would have achieved Applicants' goal for quickly identifying a subset of records within a database to produce

a representative sample of the database. Hence, combining Bossemeyer and Choy would have arrived at the claimed limitations as claimed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Wong whose telephone number is (703) 305-3018. The examiner can normally be reached on Monday to Friday 9:30am - 6:30 pm.

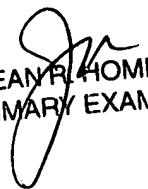
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leslie Wong
Patent Examiner
Art Unit 2177

LW
May 10, 2004



JEAN R. HOMERE
PRIMARY EXAMINER